



JENNIFER M.  
GRANHOLM

STATE OF MICHIGAN  
DEPARTMENT OF AGRICULTURE  
LANSING

DON KOIVISTO  
DIRECTOR

## **BOVINE TUBERCULOSIS (TB) ERADICATION PROGRAM**

### **STRATEGIC PLAN 2009-2029**

#### **INTRODUCTION**

Since 1998, the Michigan Departments of Community Health (MDCH), Agriculture (MDA) and Natural Resources (MDNR) have jointly developed management plans for eradicating bovine Tuberculosis (TB) from Michigan wildlife and livestock. The Bovine Tuberculosis Eradication Project continues to function as a multi-agency team of experts working with Michigan's local public health, agriculture and wildlife industries to eradicate this disease. Project partners include the above agencies and Michigan State University, Michigan Farm Bureau, Michigan United Conservation Clubs, and the U.S. Department of Agriculture (USDA).

This MDA update is based on the lessons learned from more than ten years of collective experience battling bovine TB in Michigan.

#### **OVERVIEW**

The challenges and opportunities have transformed the environment in which MDA's bovine TB eradication program operates within the state's Bovine TB Eradication Project as follows:

1. Project partners have demonstrated a track record of collaboration and accomplishment. Examples specifically related to MDA and livestock include:
  - Reduction of bovine TB transmission to livestock within the MAZ to low and sporadic levels.
  - Prevention of bovine TB spread to areas outside the MAZ.
  - Development of current animal traceability capabilities.
2. The re-emergence of bovine TB nationally has increased strain on federal funding sources. Michigan will likely receive a decreased portion of the national bovine TB eradication budget.
3. Deteriorating economic conditions nationally, and in Michigan, has put further downward pressure on current funding levels.

4. The majority of Michigan cattle are ultimately marketed outside of the state, which underscores the need to maintain confidence of stakeholders at the international, national, regional, state, and local levels. These stakeholders have diverse, and sometimes competing, program objectives.
5. Past experience in New Zealand (Figure No.1) and the United Kingdom (Figure No.2) clearly demonstrates the ability of bovine TB to spread if pathways of disease transmission are not effectively mitigated.

Figure No. 1

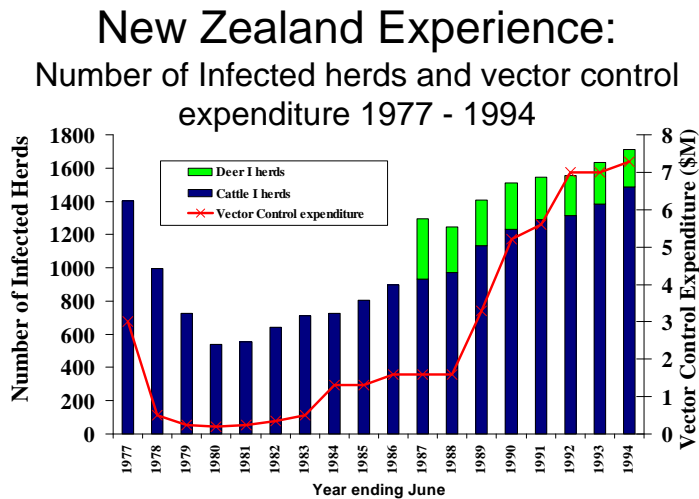
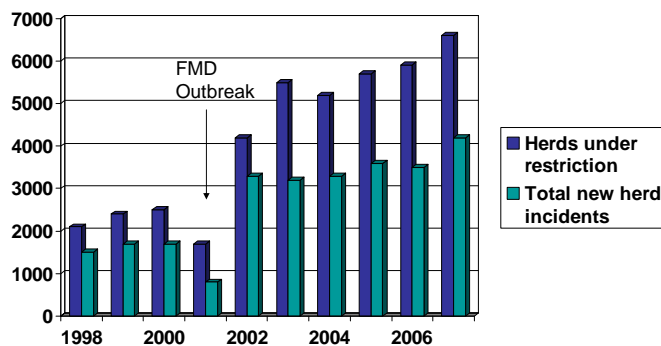


Figure No. 2

**United Kingdom Experience:**  
Herds Impacted by Bovine Tuberculosis per Year



Source: Department of Environment Food and Rural Affairs statistics

6. Research indicates indirect spread of bovine TB via contamination of feed, and water are important pathways of disease spread in Michigan. The cost-effectiveness of mitigation measures for indirect transmission pathways has not been fully assessed.

7. Government agencies are moving to risk-based animal disease strategies to most effectively use limited public resources. It is not currently feasible to mitigate all potential disease transmission pathways simultaneously.

## **CRITICAL ISSUES**

MDA's bovine TB management team has identified the following critical issues, which need to be addressed:

1. The lack of accurate diagnostic tests and effective vaccine in the short-term will likely force continued reliance on strategies that interrupt disease transmission at multiple points on the farm.
2. Local stakeholders, sportsmen, and livestock producers are fatigued and want to see "a light at the end of the tunnel." There is a growing demand by stakeholders for increased program transparency with measurable objectives with clear timelines so progress can be assessed and accountability increased.
3. The dramatically different timelines and methods used to pursue bovine TB eradication from wildlife and livestock is creating increasing tension.
  - a. Eradication of bovine TB from livestock is accomplished on privately-held agricultural land by a series of highly-regulated and resource-intensive steps that must legally be accomplished within weeks to months of bovine TB detection.
  - b. Eradication of bovine TB from wildlife depends largely on voluntary compliance by recreational hunters on both public and privately-held lands. The apparent prevalence of bovine TB in wild free-ranging deer is not projected to drop to non-detectable levels for 10-20 years.
4. Turnover of experienced staff in the bovine TB program has increased and MDA is finding it increasingly difficult to attract and retain qualified individuals.

## **STRATEGIES**

Current challenges demand better linking of public and private sector resources, expertise, and initiatives as Michigan pursues the ultimate objective of bovine TB eradication. MDA's bovine TB management proposes the following strategies to accomplish this:

1. Develop a 20-year strategic plan that provides a framework for planning sustainable approaches to disease eradication.
2. Organize operational plans consistent with the Incident Management System (IMS) for more accountability.

3. Use the Risk Analysis Model (risk assessment, risk management, and risk communication) to ensure program activities are based on sound multi-disciplinary science (biologic, economic, and sociologic).
4. Strengthen MDA's bovine TB program business practices through annual review of strategic, operational and spending performance compared to objectives and also include external stakeholders in this process.

## **GOALS AND OBJECTIVES**

### *Goal No. 1: Develop a sustainable system that ensures a high degree of animal traceability in Michigan.*

- Objective 1.1: Continue modification of the USAHerds Program to develop capabilities needed to support MDA's bovine TB eradication program.
- Objective 1.2: Continue refinement of field systems (hardware and software) capable of rapidly and accurately uploading Radio Frequency Identification (RFID) information to a central database.
- Objective 1.3: Expand public and private sector partnerships to create an effective network capable of accurately tracing cattle from farm of origin through livestock markets to final destination.

### *Goal No. 2: Increase emphasis on prevention and personal accountability.*

- Objective 2.1: Link future indemnity payments with herd plan compliance
- Objective 2.2: Obtain legal authorities to:
  - Require tougher Normal Agricultural Practices (NAP) in the Modified Accredited Zone.
  - Provide for increased penalties for non-compliance with program measures (example: failure to allow livestock testing).
  - Provide increased incentives for implementing risk reduction measures.
- Objective 2.3: Expand and refine the Wildlife Risk\*A\*Syst project as resources and stakeholder interest allow.

### *Goal No. 3: Strengthen business practices to ensure that bovine TB eradication program is a sound investment for taxpayers and stakeholders.*

- Objective 3.1: Foster increased transparency with stakeholders by sharing written strategic and operational goals, milestones, and timelines.

- Objective 3.2: Continue implementation of continuous quality improvement principles (developing written guidance, training staff to standards, monitoring to verify standards are met, and adjusting program practices as needed).
- Objective 3.3: Conduct annual workload planning to better document current use of resources and identify opportunities to increase program effectiveness.

*Goal No. 4: Continue to expand stakeholder participation in bovine TB Eradication.*

- Objective 4.1: Expand the role of the bovine TB Advisory Committee to shape the direction of the program.
- Objective 4.2: Pursue a facilitated exchange of ideas between sportsmen, livestock producers, and other citizens at the state and local levels about critical bovine TB issues.

*Goal No. 5: Expand use of the risk analysis model during planning and monitoring to assess the technical feasibility of program activities and make risk-based adjustments as needed.*

- Objective 5.1: Conduct an assessment of the scientific basis underlying current wildlife risk mitigation recommendations.
- Objective 5.2: Adjust the current Modified Accredited Zone size to better reflect risk of spread of bovine TB between wildlife and livestock.
- Objective 5.3: Identify the multi-year progression of requirements for targeted surveillance in Modified Accredited Advanced Zone (MAAZ) and Free Zone.
- Objective 5.4: Assess the cost-effectiveness of current compliance strategies.
- Objective 5.5: Establish more direct links with research agencies and institutions.
- Objective 5.6: Phase out routine provision of government-owned animal handling equipment for surveillance testing.
- Objective 5.7: Redeploy regulatory staff in MAAZ livestock markets based on risk.

*Goal No. 6: Pursue launching a pilot project that provides a framework for more intensive coordination of wildlife and livestock bovine TB eradication efforts in 2010 – 2015.*

- Objective 6.1: Develop the proposal with stakeholder input.
- Objective 6.2: Obtain funding and support for the initiative.

Objective 6.3: Conduct planning and preparations in 2009 to successfully launch the pilot project in 2010.